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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

01997.044100.1 (NEW)

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on September 28, 2006

Signature

Typed or printed name

Joseph P. Pieroni

Application Number

09/717,450

Filed

11/20/2000

First Named Inventor

NEUHOLD et al.

Art Unit

1632

Examiner

Wilson, M.C.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 53,469☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

Joseph P. Pieroni

Typed or printed name

212/218-2100

Telephone number

September 28, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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01997.044100.1 (NEW)

PATENT APPLICATION



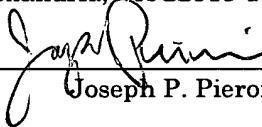
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: NEUHOLD et al.)	Group Art Unit: 1632
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Application No.: 09/717,450)	Examiner: Wilson, Michael C.
	:	
Filed: November 20, 2000)	Confirmation No.: 5417
	:	
For: TRANSGENIC ANIMAL MODEL)	Customer No. 45743 (NEW)
FOR DEGENERATIVE DISEASES	:	
OF CARTILAGE)	September 28, 2006

CERTIFICATE OF MAILING

I hereby certify that this correspondence, and the documents attached hereto, are being deposited with the United States Postal Service as First Class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date.

Date: September 28, 2006


Joseph P. Pieroni

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicants request review of the final rejection in the above-identified application based on the following remarks. No amendments are being filed with this request.

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REMARKS

I. Status of the Claims

Currently claims 55-57, 59-68, 72-77, and 79-100 are under examination in this application. Claims 55-57, 59-64, 66-68, 72-77, 79 and 81-100 stand rejected under 35 U.S.C. §112, first paragraph, as failing to be supported by an adequate written description for the phrase “chondrocyte-specific promoter.” Claims 55-57, 59-64, 66-68, 72-77, 79 and 81-100, are rejected under 35 U.S.C. §112, first paragraph, as allegedly nonenabled for their scope due to the phrase “chondrocyte-specific promoter.” Claim 65 (dependent on claim 64) and claim 80 (dependent on claim 75) have been objected to as depending on rejected base claims.

II. The Claimed Invention

Applicants' claimed invention is generally directed to a transgenic rat whose genome comprises a nucleotide sequence encoding a constitutively enzymatically active human matrix metalloproteinase that cleaves Type II collagen, wherein the nucleotide sequence encoding the metalloproteinase is operatively linked to a regulatable promoter, and a nucleotide sequence encoding a repressor-activator fusion polypeptide that binds to the regulatable promoter in the absence of a repressor-activator fusion polypeptide-binding compound and does not bind to the regulatable promoter in the presence of the compound, wherein the nucleotide sequence encoding the repressor-activator fusion polypeptide is operatively linked to a promoter that drives expression at a higher level in chondrocytes in comparison to other cells. Applicants' claimed invention is also generally directed to a

method for producing degradation of Type II collagen in the joints of a transgenic rat, which method comprises maintaining the transgenic rat described above in the presence of the transcription activator protein-binding compound until adulthood, and activating expression of the matrix metalloproteinase in the transgenic rat by withholding the compound from the rat after the rat has reached adulthood, such that the matrix metalloproteinase degrades Type II collagen in the joints of the transgenic rat.

III. The Examiner Has Failed To Consider All The Evidence Offered By Applicants To Show That The Claims Satisfy 35 U.S.C. § 112, First Paragraph

A. The Examiner Has Failed To Address Various Research Articles Referred To In The Second Askew Declaration That Identify and Discuss Various Promoters That Provide Greater Expression In Chondrocytes Than In Other Tissues

The Examiner alleges that there is insufficient evidence that “chondrocyte-specific” promoters, i.e., promoters that provide expression that is greater in chondrocytes than in other tissues, exist apart from the type II collagen promoter expressly disclosed in the specification. The Examiner maintains that the papers discussed in the Second Askew Declaration (submitted with the Amendment dated April 7, 2006) do not teach promoters that provide greater expression in chondrocytes than in other tissues. However, several such promoters (e.g., the promoters for *CD-RAP*, *aggrecan*, *type II collagen*, and *link*) and papers discussing such promoters (e.g., Dietz and Sandell (1996) *J. Biol. Chem.* 271:3311-16 (see Figures 6-7); Xie et al. (2000) *Matrix Biology* 19:501-09 (see Figures 2-7); Doege et al. (1994) *J. Biol. Chem.* 269:29232-40 (see Table 1); Zhou et al. (1995) *J. Cell Science* 108:3677-84 (see Table 1 and Figures 2-4); and Rhodes et al. (1991) *Nuc. Acids Res.* 19:1933-38 (see Figure 4) (all of which are disclosed in the Information Disclosure Statement

submitted with the Amendment dated April 7, 2006)) are discussed in the Second Askew Declaration at pages 4-6. The Examiner fails to address these papers and the data presented therein; these papers/data show that promoters that direct expression at a higher level in chondrocytes relative to other tissues are well known in the art.

B. The Examiner Has Failed To Address The Third Neuhold Declaration, Which Identifies And Discusses The CD-RAP Promoter That Provides Greater Expression In Chondrocytes Than In Other Tissues

The Examiner fails to address the Third Neuhold Declaration (submitted with the Amendment dated April 7, 2006), but rather continues to address only the Second Neuhold Declaration (submitted with the Amendment dated April 30, 2002 as Exhibit 5). The Third Neuhold Declaration provides extensive evidence that the CD-RAP promoter provides expression that is greater in chondrocytes than in nonchondrocytes. Further, the Examiner does not address the Dietz and Sandell article (discussed above), which is reviewed by Dr. Neuhold in the Third Neuhold Declaration (and by Dr. Askew in the Second Askew Declaration), and which shows that CD-RAP is expressed only in cartilage (and is therefore driven by a chondrocyte-specific promoter).

In light of the Declarations and publications of record, which demonstrate that numerous promoters provide expression that is greater in chondrocytes than in nonchondrocytes, it is respectfully requested that these 35 U.S.C. §112, first paragraph, rejections of claims 55-57, 59-64, 66-68, 72-77, 79 and 81-100 be withdrawn.

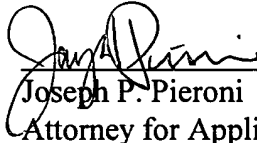
IV. The Examiner Has Improperly Objected To Claims 65 And 80

Claim 65 (dependent on claim 64) and claim 80 (dependent on claim 75) have been objected to as being dependent upon a rejected base claim. For the reasons set forth above, Applicants believe that the rejection of claims 64 and 75 is improper and should be withdrawn. Accordingly, it is respectfully requested that the objection to claims 65 and 80 also be withdrawn.

CONCLUSION

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,


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